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EV260943206US

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

BAHRAM, Khoshnood

Examiner: Fulton, Christopher W.

Serial No.: 10/040,151

Group Art: 2859

Filed: January 2, 2002

Title: AMBIENT LIGHT COLLECTING BOW SIGHT

EARLY PUBLICATION REQUEST PURSUANT TO 37 C.F.R. 1.219

February 3, 2003

Box PGPUB

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Pursuant to 37 C.F.R. 1.219, Applicant hereby requests early publication for the above-referenced nonprovisional patent application. Please find enclosed the appropriate publication fee as set forth in 37 C.F.R. 1.18(d).

Thank you for your time and attention.

Sincerely,

Joel D. Myers, Esq.
Reg. No. 44,253Myers & Kaplan
Intellectual Property Law, L.L.C.
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CERTIFICATE OF EXPRESS MAILING

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NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

Inventor: Bahram Khoshnood

For (title): Bow Sight System

1. Type of Application

This transmittal is for a continuing application.

EK362778411US

CERTIFICATION UNDER 37 C.F.R. 1.10*

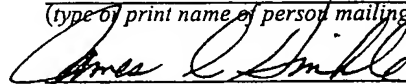
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(Express Mail certification is optional.)

I hereby certify that this correspondence and the documents referred to as attached therein are being deposited with the United States Postal Service on this date July 5, 2001, in an envelope as "Express Mail Post Office to Addressee," mailing Label Number EK362778411US, addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231.

JAMES A. HINKLE

(type or print name of person mailing paper)



Signature of person mailing paper

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***WARNING:** Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. 1.10(b).

"Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

2. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120 or 121)

The new application being transmitted claims the benefit of prior U.S. application. Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION CLAIMED.

3. Papers Enclosed

A. Required for filing date under 37 C.F.R. 1.53(b) (Regular) or 37 C.F.R. 1.153 (Design) Application

14 Page(s) of Specification
06 Page(s) of Claims
04 Sheet(s) of Drawing(s)—Formal

B. Other Papers Enclosed

05 Page(s) of declaration and power of attorney
01 Page(s) of Abstract
— Other

4. Additional Papers Enclosed

- ☒ Information Disclosure Statement (37 CFR 1.98)
- ☒ Form PTO-1449 (PTO/SB/08A and 08B)
- ☒ Citations

5. Declaration or Oath

Enclosed

Executed by:

- inventor.

6. Inventorship Statement

The inventorship for all the claims in this application is the same.

7. Language

English

8. Fee Calculation (37 C.F.R. 1.16)

Regular Application

CLAIMS AS FILED					
Claims	Number Filed	Basic Fee Allowance	Number Extra	Rate	Basic Fee 37 CFR 1.16(a) \$710.00
Total Claims (37 CFR 1.16(c))	17	- 20 =	0 x	\$18.00	\$0.00
Independent Claims (37 CFR 1.16(b))	3	- 3 =	0 x	\$80.00	\$0.00
Multiple Dependent Claim(s), if any (37 CFR 1.16(d))			+	\$270.00	
Filing Fee Calculation					\$710.00

9. Small Entity Statement(s)

Applicant claims small entity status under 37 CFR 1.9 and 1.27.

Filing Fee Calculation (50% of above) \$355.00

10. Fee Payment Being Made at This Time

Enclosed

Filing Fee \$355.00

Total Fees Enclosed \$355.00

11. Method of Payment of Fees

Check in the amount of \$355.00, check no. 1391, is attached.

ADDED PAGES FOR APPLICATION TRANSMITTAL WHERE BENEFIT OF
PRIOR U.S. APPLICATION(S) CLAIMED

13. Relate Back

WARNING: *If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. 120, 121 or 365(c). (35 U.S.C. 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. 119, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.*

(complete the following, if applicable)

A. 35 U.S.C. 120, 121 and 365(c)

NOTE: *"Except for a continued prosecution application filed under § 1.53(d), any nonprovisional application claiming the benefit of one or more prior filed copending nonprovisional applications or international applications designating the United States of America must contain or be amended to contain in the first sentence of the specification following the title a reference to each such prior application, identifying it by application number (consisting of the series code and serial number) or international application number and international filing date and indicating the relationship of the applications. . . . Cross-references to other related applications may be made when appropriate." (See § 1.14(a)). 37 C.F.R. § 1.78(a)(2).*

☒ "This application is a:

☒ continuation

☐ continuation-in-part

☐ divisional

of copending application(s)

☒ application number 09/480,723 filed on January 7, 2000" .

In the United States Patent and Trademark Office

Mailed: 01-07-2000
At: ALPHARETTA, GA

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Assistant Commissioner for Patents
Washington, District of Columbia 20231

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Sir:

Please file the following enclosed patent application papers:

Applicant #1, Name: Bahram Khoshnood
Other Applicant(s):
Title: Selective Illumination of Aiming Pins in a Bow Sight with a Plurality of Pins

- () Specification, Claims, and Abstract: Nr. of Sheets 5
(x) Declaration: Date Signed: 01-07-2000
(x) Drawing(s): Number of Sheets Enclosed: (In Triplicate):
 Formal: 0
 Informal: 4
(x) Small Entity Declaration of Inventor(s)
() Small Entity Declaration of Non-Inventor / Assignee/Licensee
() Assignment; please record and return; recordal fee enclosed.
(x) Check for \$ 345 for:
 (x) \$ 345 for filing fee (not more than three independent claims and twenty total claims are presented).
 () \$ 0 Additional if Assignment is enclosed for recording.
(x) Return Receipt Postcard Addressed to Applicant #1.

(x) Request Under MPEP § 707.07(j): The undersigned, a pro-se applicant, respectfully requests that if the Examiner finds patentable subject matter disclosed in this application, but feels that Applicant's present claims are not entirely suitable, the Examiner draft one or more allowable claims for applicant.

Very respectfully,

B. Khoshnood
Signature

01-07-2000
Date

Bahram Khoshnood
2735 Two Rock Ct. Alpharetta, GA 30004

Express Mail Label # _____ ; Date of Deposit: _____

As Filed
1/2/00

**Patent Application of Bahram Khoshnood
for
Selective Illumination of Aiming Pins in a Bow Sight with a Plurality of
Pins**

Background -- Field of Invention

The present invention relates to archery, specifically to an improved bow sight for selective illumination of aiming pins in a bow sight with a plurality of pins.

Background -- Description of Prior Art

In a hunting or a tournament situation, bow sights with a plurality of pins frequently confuse the archer in instances where all pins are equally illuminated.

Heretofor, bow sights with fiber pin illumination systems have not provided selective pin illumination with intensity level adjustability.

Summary Including Objects and Advantages

Summary

Briefly, according to the present invention, a bow sight with selective illumination of aiming pin capabilities includes a PC board with programmable electronic circuitry, a PC board housing cavity within a windage adjustment bar, a plurality of LEDs and associated fiber optic pins, at least one battery, and a user activated switch with elastic material covering, that acts as a push button pad.

Objects and Advantages

Accordingly, it is the main object of the present invention to provide an advanced selective pin illumination system. More specifically, several objects and advantages of the present invention are: to provide an archer the capability of selectively illuminating desired pin(s) for improved aiming of the bow sight; to allow the archer to select the illumination intensity level of the desired pin(s); to prolong the life of the power source by

incorporating programming for the automatic shutoff of the illumination system following a set period of unuse; and to make use of advanced electronic circuitry and control, to maximize the efficiency of the illumination system, as compared to conventional, low efficiency light systems utilized within prior art.

Still further objects and advantages will become apparent from a consideration of the ensuing description and accompanying drawings.

Brief Description of the Drawings

Fig. 1 is a perspective view of the bow sight with selective pin illumination system.

Fig. 2 is an exploded assembly view of electronic circuitry of the said bow sight system.

Fig. 3 is a frontal view of the sight attached to an archery bow.

Fig. 4 is a front view of the PC board housing cavity showing the positioning of LEDs and fiber optic elements.

Reference Numerals

- 1A LED
- 1B LED
- 1C LED
- 2 PC board housing cavity
- 3A fiber optic pin
- 3B fiber optic pin
- 3C fiber optic pin
- 4 actuating switch
- 5 PC board
- 6 batteries
- 7 battery insulator sleeve
- 8 battery housing cap
- 9 internal thread
- 10 windage adjustment bar
- 11 external thread
- 12 elastic material pad

Preferred Embodiment -- Description

Fig. 1 -- Bow Sight with Selective Pin Illumination System

Fig. 1 is a perspective view of the bow sight with selective pin illumination system.

Fig. 2 -- Electronic Circuitry Assembly of Bow Sight

Fig. 2 is an exploded assembly view of the electronic circuitry of the bow sight system. PC board 5 slides into PC board housing cavity 2 of windage adjustment bar 10 and LEDs 1A, 1B and 1C line up with end of fiber pins 3A, 3B and 3C. The other end of the fiber optic pins are formed and bent to act as aiming points. Battery insulator sleeve 7 slides over batteries 6 which are then placed into battery housing cap 8. Battery housing assembly having external thread 11 is then screwed into the internal thread 9 of windage adjustment bar 10. Elastic material pad 12 is placed over PC board housing cavity 2 to cover and seal the electronic circuitry underneath, including the actuating switch 4, and to act as a push button pad.

Fig. 3 -- Bow with Sight Attached

Fig. 3 is a frontal view of the sight attached to an archery bow.

Fig. 4 -- LEDs and Fiber Optic Elements Positioning

Fig. 4 is a front view of the PC board housing cavity showing the positioning of LEDs and fiber optic elements. Individual references are described as shown in Fig. 2.

Preferred Embodiment -- Operation

Operation and use of the selective pin illumination system of the present invention is simple, straightforward and user friendly. Prior to operation, the selective pin illumination system is assembled, including: sliding PC board 5 into PC board housing cavity 2 of windage adjustment bar 10 with LEDs 1A, 1B and 1C lined up with fiber pin ends 3A, 3B and 3C; opposite ends of the fiber optic pins are formed and bent to act as aiming points; battery insulator sleeve 7 slides over batteries 6 to be placed into battery housing cap 8, which is then screwed into the windage adjustment bar 10; and lastly, the elastic material pad 12 is placed over PC board housing cavity 2 to cover and seal the electronic circuitry underneath and to act as a push button pad.

Once the bow sight is attached to the bow, the functions of the selective pin illumination system easily can be utilized to the archer's advantage. Light from LEDs 1A, 1B and 1C transmits through fiber optic pins 3A, 3B and 3C, and concentrates in the tip to act as a bright aiming point. The electronic circuitry can be programmed such that a single switch 4 acts as an on/off switch and as a means to illuminate fiber optic pins 3A, 3B and 3C, individually or collectively. The circuitry can also be programmed to adjust the illumination intensity levels of the LED(s). The push button activator quickly becomes familiar to the archer.

Conclusions, Ramifications, and Scope

Accordingly, it can be seen that a system for selective illumination of aiming pins can be built into a bow sight, to provide improved aiming by reducing the confusion previously experienced by archers in instances where all pins were equally illuminated. Yet, the illumination system can be built in a compact, economical, water- and weather-proofed, reliable, easy to fabricate, and highly durable manner.

Although the description above contains many specificities, these should not be construed as limiting the scope of the invention but as merely providing illustrations of some of the presently preferred embodiments of this invention. Various other embodiments and ramifications are possible within it's scope. For example, the number of pins being selectively illuminated can vary along with the number of batteries and LEDs; the color or size of the fiber optic filaments can vary; and an LED can be so small as to act as an aiming point.

Thus the scope of the invention should be determined by the appended claims and their legal equivalents, rather than by the examples given.

Claims: What is claimed is:

1. An electronically lighted bow sight with fiber optic pins comprising:
electronic circuitry to illuminate a plurality of LEDs,
a plurality of elongated fiber optic pins,
a power means to energize the system, and
a switch means for activating the system and selecting the illumination of LEDs,
individually or collectively.

2. The device according to Claim 1, wherein said power means further include batteries.
3. The device according to Claim 2, wherein said electronic circuitry further is programmed for selective illumination of any or all LEDs.
4. The device according to Claim 3, wherein said switch acts as an actuating means for selecting the illumination of LEDs, individually or collectively.
5. The device according to Claim 4, wherein said electronic circuitry further is programmed for intensity adjustment of LEDs.
6. The device according to Claim 5, wherein said switch further is a means for actuating the circuitry for adjusting the intensity of the LEDs.
7. The device according to Claim 6, wherein said electronic circuitry further is programmed for the automatic shutoff of the illumination system following a set period of unuse.

Selective Illumination of Aiming Pins in a Bow Sight with a Plurality of Pins

Abstract:

An electronically lighted sighting device for use in conjunction with an archery bow. The sight comprises an electronic circuitry with at least one switch, a plurality of LEDs and elongated fiber optic pins, and having one end of each fiber optic pin located in front of a light-emitting LED and the other end extended and formed to act as an aiming point. A fiber optic transmits the light from the associated LED to the other end of the fiber optic filament; the filament tip then acts as the bright aiming point. The electronic circuitry is powered by batteries and is programmed such that by actuating the switch the archer can select each of the LEDs, individually or collectively, for illumination, along with illumination intensity levels.